# 2.0 PROJECT DESCRIPTION

# BACKGROUND AND LOCATION

SCAG is the federally designated MPO under Title 23, United States Code (USC) 134(g)(1) for a six-county region that is comprised of the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. These counties are illustrated in Figure 2.1-1. The SCAG region includes 14 subregions, which are presented in Figure 2.1-1. This area totals approximately 38,000 square miles and stretches from the state borders with Nevada and Arizona to the Pacific Ocean and from the southernmost edge of the Central Valley to the Mexican border. The region includes the county with the largest area in the nation, San Bernardino County, as well as the county with the highest population in the nation, Los Angeles County. This vast area includes millions of acres of open space and recreational land and a population of approximately 17 million people.

SCAG is required by federal and state mandates to update the long-range transportation plan for the region every three years. The SCAG region encompasses several federally designated non-attainment and maintenance areas for air quality standards. Under Section 176(c) of the Federal Clean Air Act [42 USC 7506(c)] the United States Department of Transportation (USDOT), Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) require that a non-attainment area submit a regional transportation plan every three years. The plan must conform with air quality requirements, and meet a number of other requirements, in order to continue receiving federal transportation funding. The state requirements under Section 65080 of the California Government Code generally mirror the federal requirements and require each Regional Transportation Planning Agency (RTPA) in urban areas to adopt and submit an updated RTP to the California Transportation Commission and the Department of Transportation (Caltrans) every three years.

#### PURPOSE AND NEED FOR ACTION

The purpose of the 2004 RTP is to provide a clear, long-term vision of the regional transportation goals, policies, objectives, and strategies for the SCAG region. The Plan provides an assessment of current and projected demand for travel and goods movement in the region, and includes actions to meet the region's mobility and accessibility needs. These actions must be within fiscal constraints and should promote consistency and coordination among state, regional, and local transportation plans. The development of the Plan provides an integrated, inclusive, and flexible process to help foster regional consensus on the social, economic, and environmental issues related to transportation planning in the SCAG region.

The need for the 2004 RTP arises from state and federal requirements and from the need for improvements to the regional transportation system. This need is driven by population growth and by maturation of the existing system requiring maintenance to preserve its long-term viability.

Over the next 25 years, the regional projections of growth forecast another 6 million people added to this large and diversifying area. The 2004 RTP is based on growth forecasts for the region in 2030, as shown in Table 2.1-1. By 2030 the population in the SCAG region is projected to grow to 22.9 million. This is a 38% increase from the population in 2000. The employment growth is forecast to be slightly lower at 36%. The number of households is projected to grow by 39%.

Table 2.1-1: 2004 RTP Population, Households, Employment in 2030 (in thousands)									
Subregion	1	No Project Fored	cast	Plan					
	Population	Households	Employment	Population	Households	Employment			
Imperial Assoc. of Gov.	270	84	110	270	84	111			
North LA County	1,241	368	263	1,215	362	286			
City of Los Angeles	4,425	1,649	2,213	4,413	1,663	2,265			
Arroyo Verdugo Cities	399	149	264	398	151	271			
San Gabriel Valley COG	2,479	731	941	2,472	738	951			
Westside Cities COG	245	121	298	259	130	303			
South Bay Cities COG	1,000	341	525	1,011	349	525			
Gateway Cities COG	2,392	674	996	2,415	686	1,009			
Las Virgenes-Malibu- Conejo COG	135	46	58	133	46	58			
Orange County COG	3,553	1,098	1,922	3,553	1,152	1,989			
Western Riverside County COG	2,330	792	805	2,330	808	856			
Coachella Valley COG	716	252	248	716	258	266			
SANBAG	2,713	842	1,071	2,713	898	1,179			
Ventura County COG	993	329	455	993	335	467			
SCAG Region	22,890	7,476	10,168	22,890	7,660	10,536			

Source: No Project Forecast-incorporating local input from 90% of cities and subregions. Plan Forecast-growth additions among subregions based on implementation of 2004 RTP.

Federal Guidelines (40 CFR 1502.13) require the preparation of a statement of purpose and need in conjunction with environmental documents prepared to meet the requirements of the National Environmental Policy Act (NEPA). In accordance with these guidelines, these statements are prepared to briefly specify the underlying purpose of the project and the need for the project to which the lead agency is responding in proposing actions and/or alternatives. Although adoption of the 2004 RTP is not subject to NEPA, SCAG has chosen to include this statement of purpose and need to enable proponents of specific projects included in the 2004 RTP to discuss the purpose and need for their individual projects in terms of the project's relationship to the 2004 RTP.

This statement of purpose and need has been prepared to identify the underlying purpose for adopting the 2004 RTP. This statement was not prepared to be a comprehensive statement of need for each individual RTP project. Where appropriate, this statement of need may be incorporated by reference in project-specific NEPA documents as provided in 40 CFR 1502.21.

The transportation planning process for the RTP is continuous as the region is constantly undergoing change. The 2004 RTP presents an assessment of the growth and economic trends in the SCAG region for the years 2000-2030 and provides strategic direction for investments during this time period. In order to update the Transportation Plan for the region, adjustments were required to the regional growth forecast, the airport strategy, the revenue forecast, and the plans and programs, as well as the incorporation of SCAG's on-going visioning process.

#### PROPOSED ACTION

SCAG is the federally designated MPO under Title 23, USC 134(g)(1), for the six-county region. SCAG is required by state and federal mandates to prepare a RTP every three years.

The 2004 RTP is a long-range regional transportation plan that provides a blueprint to help achieve a coordinated and balanced regional transportation system. Transportation projects in the SCAG region must be consistent with the RTP in order to receive federal funds. The RTP includes: a policy element that includes goals, policies, and performance indicators, an action element that identifies projects, programs, and implementation. In addition the RTP includes and a description of regional growth trends to help identify future needs for travel and goods movement.

# **Policy Element**

The 2004 RTP was developed in accordance with seven goals for the region detailed in Table 2.1-2. These goals reflect the requirements of the USDOT as identified in Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) to consider seven planning factors and strategies in the preparation of RTPs. The goals are provided in no particular order.

# Table 2.1-2: Adopted 2004 RTP Goals

- 1. Maximize mobility and accessibility for all people and goods in the region.
- 2. Ensure travel safety and reliability for all people and goods in the region.
- 3. Preserve and ensure a sustainable regional transportation system.
- 4. Maximize the productivity of our transportation system.
- 5. Protect the environment, improve air quality and promote energy efficiency.
- 6. Encourage land use and growth patterns that complement our transportation investments.

Source: SCAG. (2003). Regional Transportation Plan. Los Angeles, CA.

The goals demonstrate the need to balance many priorities in a cost-effective manner. The priorities for SCAG's regional investments are identified in the RTP as follows:

- The region's vast investments in multi-modal transportation infrastructure must be
  protected. This infrastructure is maturing and requires maintenance. The region cannot
  afford to replace the existing infrastructure and must protect it for future generations.
- A maturing system dictates an increased operational focus that leverages technology to maximize the system's productivity. This same investment will also minimize the variations of travel time, and increase reliability, due to incidents, weather, and other factors. The

region cannot substantially expand the transportation system, so the existing system must be utilized to its fullest, maximizing its reliability.

- Air quality for the region's residents must be improved and must meet federal regulations.
   Not doing so would undermine the health of our population and risk losing billions of dollars in federal funding to the region.
- The investments in the RTP must address travel safety and modal balance; recognize the
  importance of providing safe travel choices; meet the needs of transit dependents groups
  and the goods movement community; and provide connections among the highway
  system, ports, and airports.
- The RTP integrates urban-form strategies as a means to influence transportation performance and the economy. Without such integration, transportation needs in the future will outpace the ability to pay for them.
- The RTP must address these priorities in a cost-effective manner, so that mobility and accessibility are maximized for people and goods.

In order to achieve the goals described in Table 2.1-2 and reflect the priorities listed above, the 2004 RTP employs a series of policies. These policies were adopted by the SCAG Regional Council to guide the development of the 2004 RTP, and they are provided in Table 2.1-3.

# Table 2.1-3: Adopted 2004 RTP Policies

- 1. Transportation investments shall be based on SCAG's adopted Regional Performance indicators.
- Ensuring safety, adequate maintenance, and efficiency of operations on the existing multimodal transportation system will meet RTP priorities and will be balanced against the need for system expansion investments.
- RTP land use and growth strategies that differ from currently expected trends will require a collaborative implementation program that identifies required actions and policies by all affected agencies and sub-regions.
- 4. HOV gap closures that significantly increase transit and rideshare usage will be supported and encouraged, subject to Policy #1.

Source: SCAG. (2003). Regional Transportation Plan. Los Angeles, CA.

# Performance Expectations

As directed by the first policy, performance measures play a critical role in the development of the RTP. Performance measures quantify regional goals and provide a way to evaluate progress over time. Assessing the degree to which the outcomes of the 2004 RTP investments meet the regional goals requires complex technical analysis. Performance measurement is a critical part of this analysis. The same measures will be used to monitor progress in meeting the performance expectations of the RTP. This monitoring allows the region to correct its course over time as lessons are learned and new trends are established. For the 2004 RTP, one or more

performance indicator for each goal was developed, tested, and evaluated. The resulting indicators are shown in Table 2.1-4.

Performance Indicator	Performance Measure(s)	Definition	Performance Outcome					
Mobility	Average Daily Speed	<u>Speed</u> - experienced by travelers regardless of mode.	11% improvement					
	Average Daily Delay	Delay - excess travel time resulting from the difference between a reference speed and actual speed. Total daily delay and daily delay per capita are the indicators used.	37% improvement					
Accessibility	Percent PM peak period wo home.	Percent PM peak period work trips within 45 minutes of home.						
	Distribution of work trips tra	Auto: 7% improvement; Transit: 6% Improvement						
Reliability	Percent variation in travel time.	Day-to-day change in travel times experienced by travelers. Variability results from accidents, weather, road closures, system problems and other non-recurrent conditions.	10% improvement					
Safety	Accident rates	Measured in accidents per million persons per mode.	0.5% improvement					
Cost Effectiveness	Benefit-to-Cost (B/C) Ratio	Ratio of benefits of RTP investments to the associated investment costs.	\$3.73					
Productivity	Percent capacity utilized during peak conditions	Transportation infrastructure capacity and services provided. Roadway capacity: vehicles per hour per lane; Transit capacity: seating capacity utilized).	20% improvement in known bottle necks					
Sustainability	Total cost per capita to sustain current system performance	Focus is on overall performance, including infrastructure condition. Preservation measure is a sub-set of sustainability.	\$20 per capita, primarily in preservation costs.					
Preservation	Maintenance cost per capita to preserve system at base year conditions	Focus is on infrastructure condition. Sub-set of sustainability.	Maintain current conditions.					
Environmental	Emissions generated by travel	Measured/forecast emissions include CO, NO <sub>X</sub> , PM <sub>10</sub> , SO <sub>X</sub> and VOC. CO <sub>2</sub> as a secondary measure to reflect greenhouse gas emissions.	Meets conformity requirements.					

# **Action Element**

The programs, projects, and implementation actions of the proposed RTP focus on system management, transportation demand management, strategic system expansion, and the land use-transportation connection.

# System Management

A key component of System Management is protecting the investment in the current transportation infrastructure. The 2004 RTP sets aside over \$6 billion of additional funds for infrastructure preservation and a total budget for Operations and Maintenance of approximately \$83 billion. System management includes operational strategies (getting the most out of the existing system) and the Congestion Management System (CMS).

# Transportation Demand Management

Transportation Demand Management (TDM) is the all-inclusive term given to a variety of measures used to improve the efficiency of the existing transportation system by managing travel demand. TDM strategies encourage the use of alternatives to the single occupant vehicle such as carpools, vanpools, bus, rail, bikes, and walking. Alternative work-hour programs, such as compressed workweek programs, flextime and work-at-home (telework and home-based businesses) are also TDM strategies, as are parking management tactics, such as preferential parking for carpools and parking pricing.

# Strategic System Expansion / Capital Investments

#### Highway and Arterial Investments

The 2004 RTP contains a total of approximately \$39 billion in public funding for proposed, committed, and programmed highway and arterial projects. This figure includes all capital improvements for the highway and arterial network, including mixed-flow lanes, High Occupancy Vehicle (HOV) lanes, interchanges, truck climbing lanes, and grade crossings, but it does not include maintenance. In total, the 2004 RTP includes approximately 2,700 new freeway/HOV lane miles, approximately 3,300 new arterial lane miles, and over 700 other new lane miles.

New lanes miles by county are summarized in Table 2.1-5.

#### **Goods Movement**

The focus of the goods movement improvements in the 2004 RTP is on truck traffic and freight rail. The regional transportation system will be challenged to accommodate the projected doubling of truck trips by 2030. The 2004 RTP acknowledges the need for strategies that will accommodate this future growth in truck traffic. While specific strategies and alignment determinations need further evaluation and consensus building, the Plan identifies corridor improvement needs for a number of corridors. The Plan also proposes adding a number of truck climbing lane improvements to the Region's highway system. The Regional Rail Capacity

Table 2.1-5: New Regional Lane Miles by County*									
County	Imperial	Los Angeles	Orange	Riverside	San Bernardino	Ventura	SCAG total		
Freeway Lane Miles	26	404	441	272	735	62	1,940		
Principal Arterial Lane Miles	0	325	487	490	421	49	1,772		
Minor Arterial Lane Miles	32	332	23	431	637	40	1,495		
Major Collector Lane Miles	0	124	16	344	249	4	737		
HOV Lane Miles	7	270	41	189	235	3	745		
Freeway Link Lane Miles	0	17	9	3	8	0	37		
Total Lane Miles in each County	65	1,472	1,017	1,729	2,285	158	6,726		

Source: SCAG. (2003). Regional Travel Demand Model. Los Angeles, CA.

Improvement Program proposes rail capacity improvements that include a total investment of \$3.4 billion in Southern California: \$1.2 billion for railroad infrastructure projects and approximately \$2.2 billion in grade separation projects.

One strategy being explored is the concept of dedicated facilities to accommodate truck traffic. This system would comprise up to 140 center-lane miles of dedicated facilities from San Pedro Bay ports, through the East-West corridor and out in strategic distribution points northeast or southwest of the urbanized areas.

# Maglev System

The Maglev system is the name for an elevated monorail using advanced magnetic levitation technology to move people and goods at a very high speed (up to 310 miles per hour (mph)), with a high degree of safety, comfort, and reliability. For the past four years, SCAG has been studying the feasibility of developing four Maglev corridors in the region:

- Los Angeles Airport (LAX) to March Inland Port in Riverside
- LAX to Palmdale
- Los Angeles Union Passenger Terminal (LAUPT) to Orange County (Anaheim)
- LAX to Orange County (Irvine Transportation Center).

<sup>\*</sup> This analysis does not include transit projects, MagLev projects, goods movement enhancement projects, or CETAP corridors with unknown routes.

If implemented as scheduled, the proposed system would include approximately 275 miles of Maglev corridors in the SCAG Region by 2030 that could move up to 500,000 riders a day.

#### Marine Ports

The ports of Los Angeles, Long Beach and Port Hueneme are planning to invest \$6 billion over the next 25 years in infrastructure development programs. These efforts will include widening arterial streets, upgrading freeway ramps, separating railroad grade crossings, expanding rail yards, and adding intelligent transportation systems (ITS) to improve ground access management.

#### Inland Port

The 2004 RTP identifies an inland port that would serve as a cargo facilitation center where a number of import, export, manufacture, packing, warehousing, forwarding, customs, and other activities (with possible Foreign Trade Zone and/or Enterprise Zone inclusion) could take place in close proximity or even at the same site.

#### **Aviation**

SCAG has developed a new aviation demand forecast and plan that maximizes airport efficiency on a regional scale. This new aviation plan, termed the "Preferred Aviation Plan," is a decentralized airport demand strategy to serve a forecasted regional demand of 170 million passengers in 2030, which results in an estimated economic benefit of \$18 billion and 131,000 jobs over a constrained system.

Under the Preferred Aviation Plan the future demand for air travel and air cargo will be largely served by using available capacity at airfields located in the Inland Empire and north Los Angeles County. Table 2.1-6 presents the million annual passengers in 2030 for the proposed ten commercial airport system, which includes:

- Bob Hope (BUR)
- John Wayne (SNA)
- Los Angeles International (LAX)\*
- Long Beach (LGB)
- March Inland Port (MAR)
- \*Operated by Los Angeles World Airports
- Ontario International (ONT)\*
- Palm Springs (PSP)
- Palmdale Regional (PMD)\*
- San Bernardino International (SBD)
- Southern California Logistics (SCL)

Under the Preferred Aviation Plan air cargo service in the region will become more decentralized. LAX will handle only twenty-seven percent of air cargo for the region, compared to its current share of seventy-five percent. Ontario's share of air cargo will increase from twenty-one to twenty-six percent. Other airports in Palmdale and the Inland Empire will ultimately handle a combined forty-one percent of the regional demand.

Table 2.1-6: 2002 and the 2030 Preferred Aviation Plan Air Passengers											
	BUR	JWA	LAX	LGB	MAR <sup>1</sup>	ONT	PSP	PMD	SBD	SCI	TOTAL
Existing Conditions (2002)	4.6	7.9	56.2	1.4	0	6.5	1.1	0	0	0	77.8
Preferred Aviation Plan (2030)	10.7	10.8	78.0	3.8	8.0	30.0	3.2	12.8	8.7	4.0	170.0

<sup>1</sup>Air Force Reserve Activity at March is projected to remain at 51,426 annual operations. The primary objective of the commercial airport is cargo operations. SCAG projections assume commercial passenger service not yet contemplated by the March Joint Powers Commission. SCAG has a long standing policy to give priority to military and national defense needs

# Public Transportation System

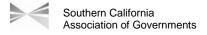
The 2004 RTP contains a total of approximately \$25 billion in public funding for proposed, committed, and programmed transit projects, not including operation and maintenance. The goals of public transportation services are to ensure mobility for people without access to automobiles and to provide attractive alternatives for drive-alone motorists or discretionary riders. Strategies include a significant increase in service availability, major expansion in the use of bus rapid transit, and some re-structuring of service to ensure efficient utilization of available capacity. New rapid bus lines will be implemented on heavily-traveled corridors and many bus lines will be added or restructured to feed into the existing and proposed urban and commuter rail system.

The 2004 RTP calls for increased and better coordination between transit and land-use planning to increase ridership, reduce congestion, and improve air quality. The regional transit program calls for the local and regional transit and planning agencies to promote transit-oriented development cooperatively along the major transit corridors. The 2004 RTP also supports development of a flexible transit system enabling a strong transit linkage to transit activity centers.

#### **Land Use-Transportation Connection**

The following tenets were developed through SCAG's Growth Visioning process to serve as the foundation for the land use strategies in the 2004 RTP:

- Using in-fill where appropriate to revitalize underutilized development sites
- Focusing growth along transit corridors and nodes to utilize available capacity
- Providing housing opportunities near job centers, and job opportunities, when appropriate, in housing-rich communities
- Providing housing opportunities to match changing demographics



- Ensuring adequate access to open space
- Changing land use to correspond to the implementation of a decentralized regional aviation strategy and its consequent short- and long-term job creation
- Changing land use to correspond to the implementation of regionally significant major transportation projects and their consequent short- and long-term job creation
- Incorporating the local input and feedback on future growth received from 90 percent of the jurisdictions in the SCAG Region.

# **Proposed Plan and RTP EIR Alternatives**

The alternatives evaluated for the RTP EIR include:

The **Proposed Plan**, which includes all of the elements summarized above, contains transportation/urban-form strategies that encourage compact growth, increased jobs/housing balance, and centers-based development, where feasible, in all parts of the region.

The **No Project** Alternative includes only those programmed transportation projects that have had federal environmental clearance by December 2002. These reasonably foreseeable projects fulfill the definition of the mandated CEQA No Project Alternative.

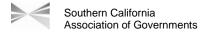
The **2001 RTP Modified** Alternative is an update of the adopted 2001 RTP to reflect the most recent growth estimates and transportation planning decisions and assumptions. This Alternative does not include urban-form strategies.

The **PILUT**<sup>1</sup> **1 (Infill)** Alternative includes transportation investments and urban-form strategies that encourage a substantial portion of future growth to be concentrated in existing urban centers through infill and redevelopment. This alternative has been designed to reduce consumption of open space and habitat. Impacts of the PILUT 1 Alternative are less adverse than the Plan for each resource category, and, overall, the PILUT 1 alternative is the environmentally superior alternative.

The **PILUT 2** (**Fifth Ring**) Alternative includes additional transportation investments and land use/transportation strategies that encourage growth toward a more decentralized urban form and an improvement in the jobs/housing balance in the outlying areas of the region. Specifically, PILUT 2 focuses on improving and expanding infrastructure to efficiently utilize undeveloped land on the outer edges of the urbanized area.

<sup>&</sup>lt;sup>1</sup> PILUT is Planning for Integrated Land Use and Transportation.





# Relationship to other EIRs

The 2004 RTP PEIR builds upon the analysis and mitigation in the 2001 RTP PEIR. The project list for the 2004 RTP is similar to the project list for the 2001 RTP, although some of the transportation projects from the 2001 RTP are now considered committed and are included in the No Project Alternative. The 2004 RTP PEIR evaluates the most recent projects and policies and provides more direct comparisons between current conditions and expected future plan conditions. The 2004 RTP PEIR includes additional analysis of cumulative, growth-inducing, and other indirect impacts.

#### Intended Uses of the PEIR

SCAG will use this PEIR as part of its review and approval of the 2004 RTP. The lead agencies for individual projects analyzed in this PEIR are required to prepare project level CEQA documents. The lead agencies for individual projects may use this PEIR as the basis of their regional and cumulative analysis. Moreover, it is the intent of SCAG that member agencies and others use the information contained within the PEIR in order to "tier" subsequent environmental documentation of individual projects in the region. Information from this document may also be incorporated in future County Congestion Management Programs and associated environmental documents, as applicable.

The 2004 RTP is intended to meet the changing socioeconomic, transportation infrastructure, financial, technological and environmental conditions of the region. Individual projects are preliminarily identified in the 2004 RTP; however, this PEIR is programmatic in nature and does not specifically analyze these projects. Project-level analyses will be prepared by implementing agencies on a project-by-project basis. Project specific planning and implementation undertaken by each implementing agency will depend on a number of issues, including: policies, programs and projects adopted at the local level: restrictions on federal, state and local transportation funds; the results of feasibility studies for particular corridors; and further environmental review of proposed projects.